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ZOOLOGY.—*A new Liolaemus and two new Syrrhopus from Peru.*¹

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This paper deals with some novelties found in a collection of Peruvian reptiles and amphibians made by Warren F. Walker, Jr. Mr. Walker intended to work out this collection himself but due to the pressure of college studies he was unable to complete the task. Hence it became my lot to finish identifying the collection and to publish the descriptions of the new forms found therein.

Liolaemus walkeri sp. nov.

Type.—Museum of Comparative Zoology no. 43770, a male, from Lloclapampa, circa 10,000 feet altitude, Department of Junin, Peru, collected by Warren F. Walker, Jr., June 26 to July 3, 1936.

Paratypes.—Museum of Comparative Zoology nos. 43771-9 and ten uncatalogued specimens with the same data as the type. Many paratypes are gravid females.

Diagnosis.—Allied to *Liolaemus gracilis* and *bibronii*; from the former it differs in possessing a larger scale count around the middle of the body, an antehumeral fold, hind limbs averaging shorter, and in coloration; from the latter it differs in not having mucronate dorsal scales, a larger average number of anal pores, and in coloration. This new form is also allied to *Liolaemus alticolor* from which it differs in having smooth temporal scales, and in not having mucronate dorsal scales, and in coloration.

Description.—Nostril lateral; upper head scales rather large, smooth; an azygos frontal separated from the interparietal by a pair of frontoparietals, the right frontoparietal being divided more or less longitudinally (in the paratypes, frontoparietals variously fused or split); interparietal as large as, or larger than, parietals (also, smaller than parietals in many paratypes); a series of about three enlarged supraoculars (about three or four in paratypes); a single series of scales between the labials and infraorbital (in some paratypes, part of one labial is actually in contact with infraorbital); temporal scales smooth; ear opening with indistinct denticulation in front (fairly distinct in some paratypes); sides of neck covered with very small scales, with an irregular, longitudinal fold; a short, curved antehumeral fold; dorsal scales moderate, more or less rhomboidal, strongly keeled, pointed, although not mucronate; ventral scales slightly larger or about the same size, rounded, hexagonal, or rhomboidal, smooth; about 58 scales around the middle of the body (about 50-62 in paratypes); about 63 scales from occiput to rear of hind limb (about 55-68 in paratypes); the adpressed hind limb reaches the axilla (from the axilla, or a little further, to well behind the

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axilla in paratypes); hinder side of thighs uniformly granular; 4 anal pores (4-6 pores in five paratypes, the rest with none; apparently present in males only, as in other members of the genus); caudals as large as, or larger than, dorsals.

Coloration in alcohol.—Above, brown (gray where outer epidermis has peeled off), a narrow, dark brown or black vertebral stripe extending from the neck almost to the end of the tail, rather broken on the tail; a light grayish stripe about two scale rows wide beginning at the upper posterior border of the eye extending on to the tail where it becomes obsolete; below this stripe, on the side, another narrower and more obscure beginning at the lower posterior border of the eye and extending to the hind limb, almost obsolete in front of the ear; dark brown or black spots on the dorsum and head, on the dorsum extending as far as the lowest stripe; also, below the upper grayish stripe, sides speckled with whitish; below, gray, rear of hind limbs, belly, and chest overlaid with black; throat and underside of head marked with black; chin blackish gray; therefore, it is seen that the ground color is largely obscured; underside of tail grayish, spotted with blackish.

The five paratypes with anal pores, which are all males, differ somewhat from the type in coloration. In no. 43772, the largest of these, the dark vertebral stripe and the lower light stripe are absent, the stripe that is present being ill defined, and there are no dorsal spots on this individual; in the smaller examples, the dorsal and lateral stripes are much more distinct even than in the type, the beginnings at the eye being plainly visible; below, in the smaller individuals, the black of the belly extends not at all or but little onto chest; in no. 43775, the smallest of these five, the body is uniform blackish gray below, without black markings. Males of this species, as they become older, become more indistinctly striped above and more extensively black below.

The female coloration is like that of what are apparently juvenile males, with the stripes perfectly distinct and the underside of the body light gray to blackish gray, darker on chin, with the black being absent.

Underside of tail in all paratypes is grayish or whitish brown, marked, or unmarked with dark brown; also the vertebral stripe may be margined with grayish and may be unbroken on tail; light stripes may be whitish brown as well as grayish; dorsal spots are sometimes lacking as also spots on the head.

Measurements:—

	Length head and body	Tail ¹	Total length	Hind limb	Hind foot
Type no. 43770	54 mm	69 mm	123 mm	27 mm	14 mm
Paratypes nos. 43771-9 and ten uncatalogued specimens	60-30 mm	67-42 mm	127-72 mm	28-16 mm	15-8 mm

¹ The tail of type and largest paratype regenerated.

This species is named for Warren F. Walker, Jr., the collector of a valuable Peruvian herpetological collection which he has kindly presented to the Museum of Comparative Zoology.

Remarks:—Specimens of this species in the Museum of Comparative Zoology from Ticlio, circa 15,600 feet altitude, Department of Lima, and Janchiscochas Mine, 40 kilometers north of Jauja, Department of Junin, present certain small differences from the type series which may or may not entitle them to separate recognition. For example, one of the Ticlio

series, the only one with any pores, has but three. Therefore, these specimens were not included as paratypes.

Syrrhopus montium sp. nov.

Type.—Museum of Comparative Zoology no. 22858 from Cascas, near Huasahuasi, Department of Junin, Peru, collected by Warren F. Walker, Jr., August 31, 1936.

Paratypes.—Museum of Comparative Zoology nos. 22859–61 with the same data as the type.

Diagnosis.—Allied to *Syrrhopus simonsii* from which it differs in having shorter hind limbs, no dorsal warts forming longitudinal folds, and in coloration.

Description.—Tongue suboval, entire; vomerine teeth none; snout rounded, longer than the diameter of the eye; loreal region concave and oblique; canthus rostralis distinct, curved; nostril a little nearer the tip of the snout than the eye; interorbital space slightly broader than upper eyelid; no tympanum, tips of digits not or but extremely feebly swollen; digits short; first finger slightly shorter than second; first toe shorter than second; inner metatarsal tubercle rather large but ill defined, outer virtually indistinguishable from many surrounding poorly defined tubercles; the tibio-tarsal articulation of the adpressed hind-limb does not reach the axilla (it does in two paratypes); granulate above, especially posteriorly; sides very coarsely granulate; belly, chest, throat, and lower surface of thighs also very coarsely granulate.

Coloration in alcohol.—Above, dark purplish brown, limbs obscurely cross-banded with darker; the inner side of hand and the two inner fingers, inner side of foot and the three inner toes white, both above and below, this white also marked in places with dark purplish brown; below whitish, belly slightly suffused and marked with purplish brown, underside of limbs, except outer part of lower side of thighs, and on the hands and feet as previously noted, colored like dorsum.

The coloration of the paratypes is essentially similar to that of the type except the crossbands on limbs may be absent; below, there may be extensive white areas on limbs, and below the dark suffusion may be a bit more pronounced than in type.

Measurements.—

	Length of head and body	Head	Hind limb	Fourth toe
Type no. 22858	29 mm	10 mm	30 mm	6 mm
Paratypes nos. 22859–61	26–21 mm	10–7 mm	30–27 mm	7–6 mm

Syrrhopus juninensis sp. nov.

Type.—Museum of Comparative Zoology, no. 22851, a male from Cascas near Huasahuasi, Department of Junin, Peru, collected by Warren F. Walker, Jr. August 31, 1936.

Paratypes.—Museum of Comparative Zoology nos. 22852–7 with the same data as the type.

Diagnosis.—Allied to the preceding species from which it differs in being smooth below, in having a more distinct outer metatarsal tubercle, a distinct fold above the spot where the tympanum should be, and in coloration.

Description.—Tongue suboval, entire (very slightly nicked in some paratypes); vomerine teeth none; snout rounded, longer than the diameter of the eye (about the same length in some paratypes); loreal region concave

and oblique, canthus rostralis distinct, curved, nostril slightly nearer the tip of the snout than the eye; interorbital space about as broad as upper eyelid or a bit narrower; no tympanum, a distinct fold over the tympanic area; tips of digits very feebly swollen or not swollen at all; digits fairly short; first finger slightly shorter than second; first toe shorter than second; toes unwebbed at base; inner metatarsal tubercle rather large, outer decidedly smaller; the tibio-tarsal articulation of the adpressed hind limb reaches the axilla (a bit beyond the axilla in two paratypes); above with low, rather indistinct warts, especially posteriorly (warts more distinct in some paratypes, in others almost obsolete); smooth below.

Coloration in alcohol.—Above, dark gray, decidedly lighter on sides and on limbs, an obscure blackish crossband between the eyes, a similar band from the nostril to the eye and from the posterior corner of the eye along the "supratympanic" fold; dorsum obscurely marked with blackish; below, brownish white, suffused with light gray.

In some paratypes the obscure band anterior to the eye starts at the tip of the snout; also the "supratympanic" blackish marking may be absent. In addition, the limbs above may be obscurely crossbanded; while in some the middle of the back is not darker than the sides; markings above quite distinct in one paratype.

Measurements.—

	Length head and body	Head	Hind limb	Fourth toe
Type no. 22851	31 mm	10 mm	44 mm	9 mm
Paratypes nos. 22852-7	30-23 mm	10-8 mm	39-29 mm	8-6 mm

Remarks.—Both of these frogs have been found on dissection to have a broad cartilaginous sternum and more or less T-shaped terminal phalanges. These characters, in addition to the absence of vomerine teeth, would indicate membership in the genus *Syrrhopus*.

The terminal phalanges appear to be more T-shaped than in *Eusophus* hence these are not considered members of that genus without vomerine teeth. It appears likely that *Syrrhopus*, *Eleutherodactylus* and *Eusophus* may eventually be merged. See H. W. Parker, Ann. Mag. Nat. Hist. 10 (10): 344. 1932.

ICHTHYOLOGY.—*Status of the Asiatic fish genus Culter*.¹ HUGH M. SMITH, United States National Museum.

In 1855 Stephan Basilewsky published a paper in which were described various new genera and new species of Chinese fishes. None of the generic names except *Culter* has survived to the present time, all the others having long ago been discarded as synonyms.

The characters given in the definition of the genus were mostly applicable to several other cyprinoid genera, and scarcely a single distinctive feature was noted. One outstanding character was a dorsal fin situated over the space between the ventral and anal fins, with its second simple ray very robust and osseous. Included under the

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